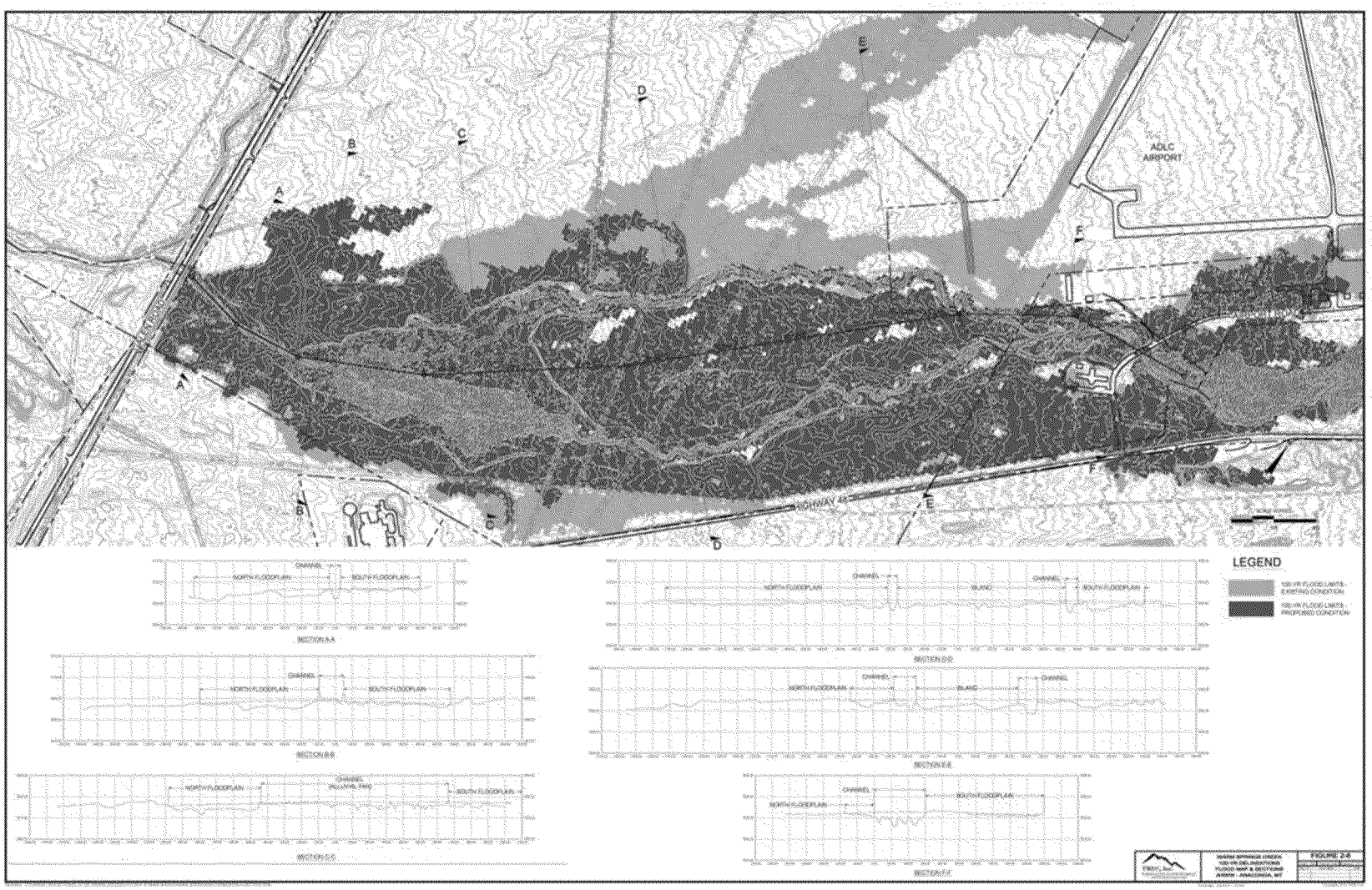


2.1.1.2 Lower Warm Springs Creek

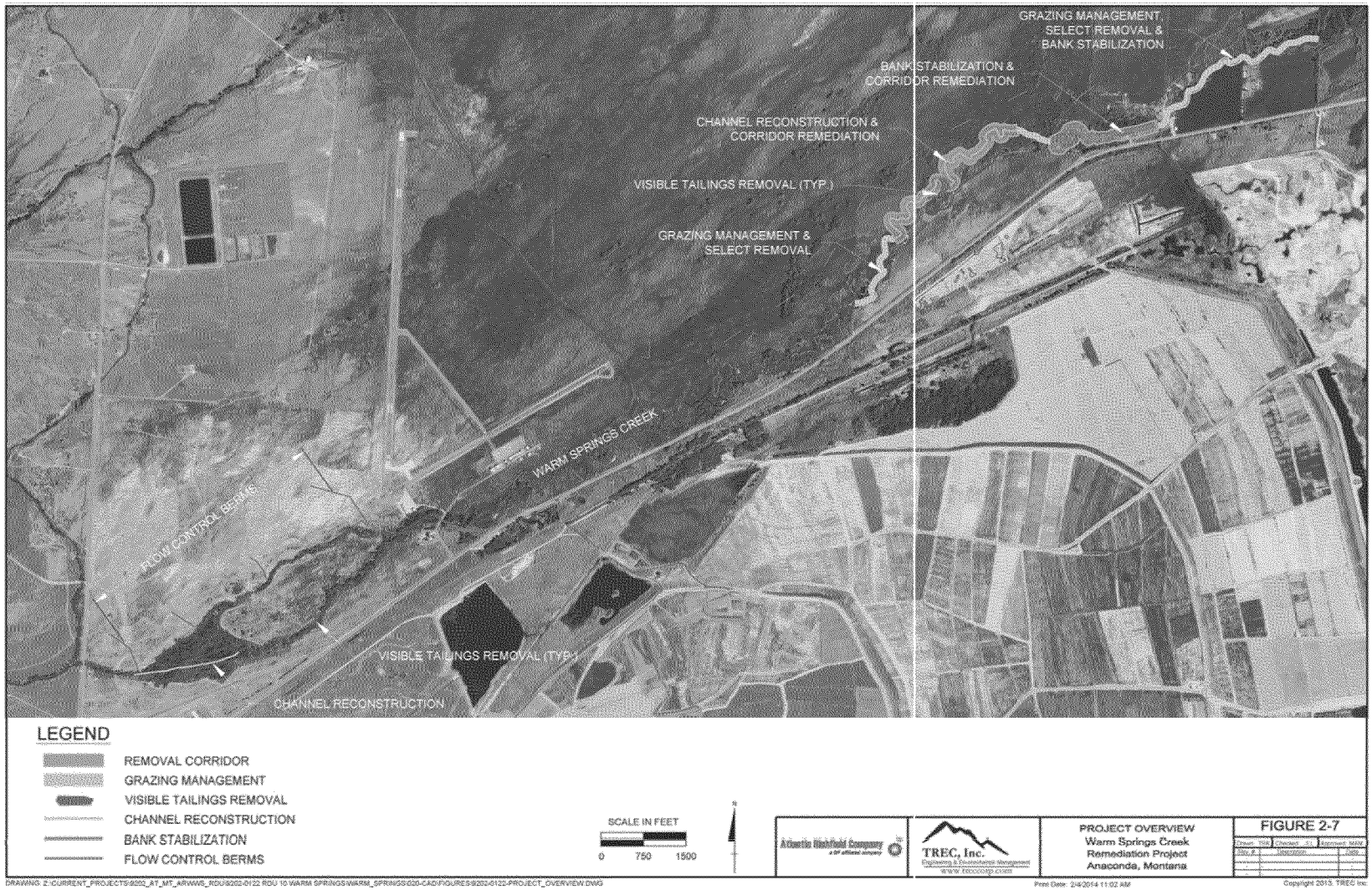
The proposed design for Lower Warm Springs Creek incorporates a number of actions including:

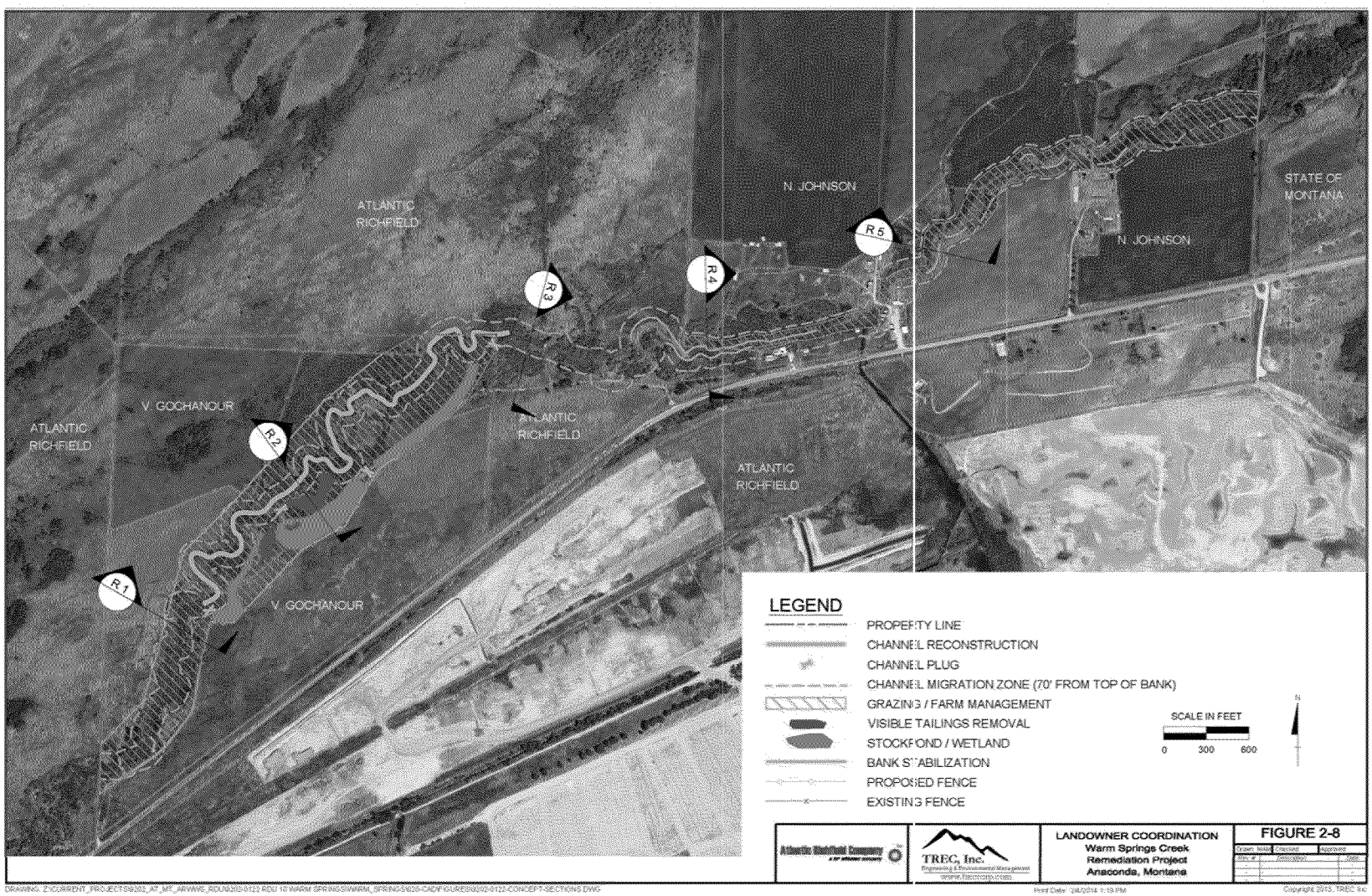
1. The Installation of three to five temporary stream crossing [see TREC memo on temporary stream crossings (TREC 2014)] (**Figures 2-9, 2-10, and 2-11**)
2. Visible Tailings Removal (TYP.) (**Figures 2-7 and 2-8**)
3. Channel Reconstruction & Corridor Remediation (**Figures 2-7 and 2-8**)
4. Bank Stabilization & Corridor Remediation (**Figures 2-7 and 2-8**)
5. Grazing Management, Select Removal, & Bank Stabilization(**Figures 2-7 and 2-8**)
   - Visible tailings will be removed
   - Concentrations above cleanup levels within the Channel Migration Zone (CMZ) will be removed
   - Historic channel will be reconstructed (Gochanour Property) (**Figures 2-9, 2-10, and 2-11**)
   - Eroding banks will be stabilized
   - Abandoned channel will be plugged to create stockpond/wetlands (**Figure 2-10**)
   - Grazing / agriculture management
   - Beaver management

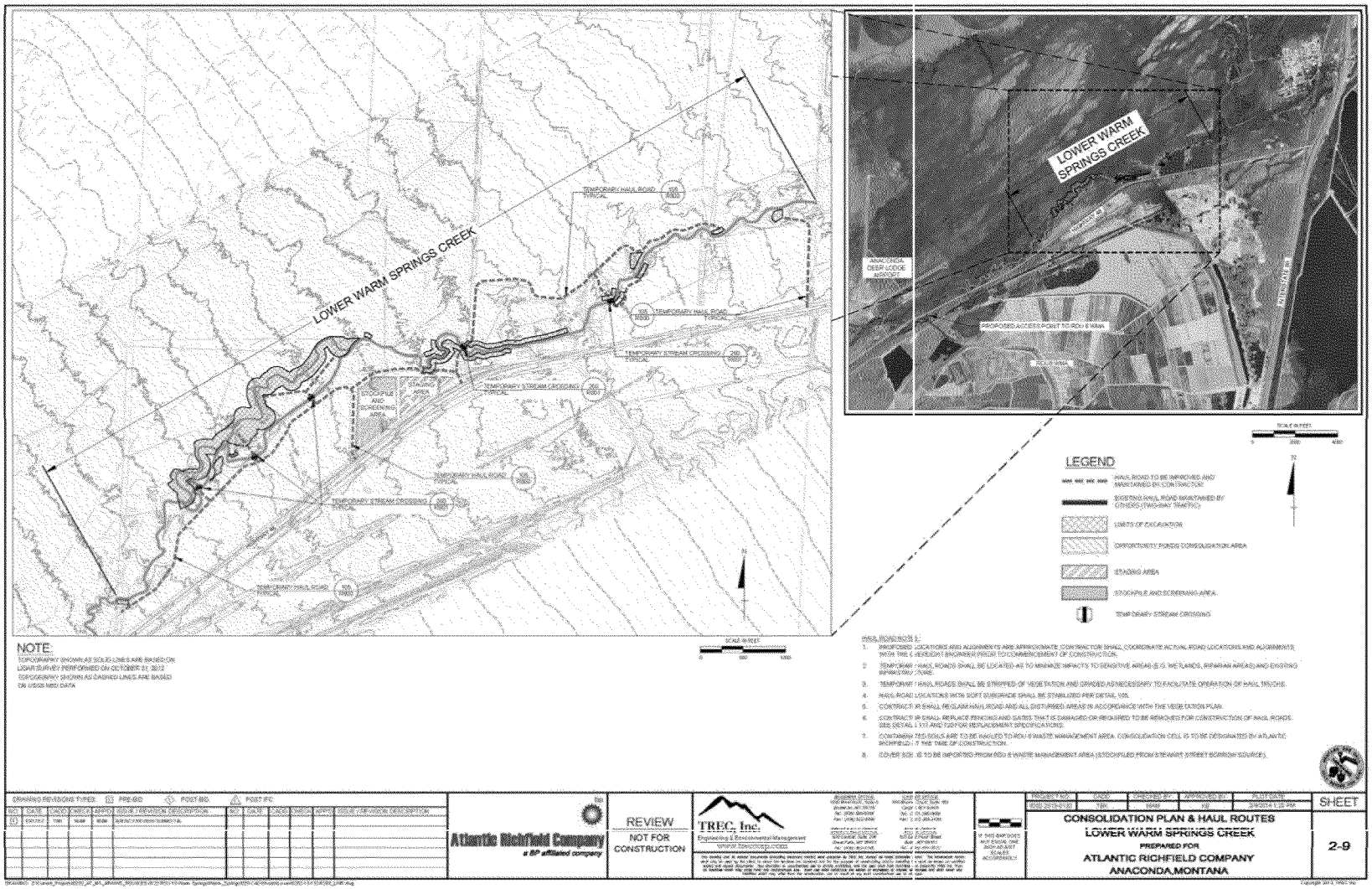
Within the Lower Warm Springs Creek Project Area, the first 1,700-foot upstream section includes minimal remedial activity with little impact to the existing channel and vegetation. As you move downstream, contaminant removal activities increase. Contaminant removal involves preserving a 5-foot wide section of existing bank closest to the channel and removing the contaminated soils located behind this section. This removal technique is used to prevent significant quantities of sediment from entering the stream. The top 12-24 inches of contaminated soils are expected to be removed.

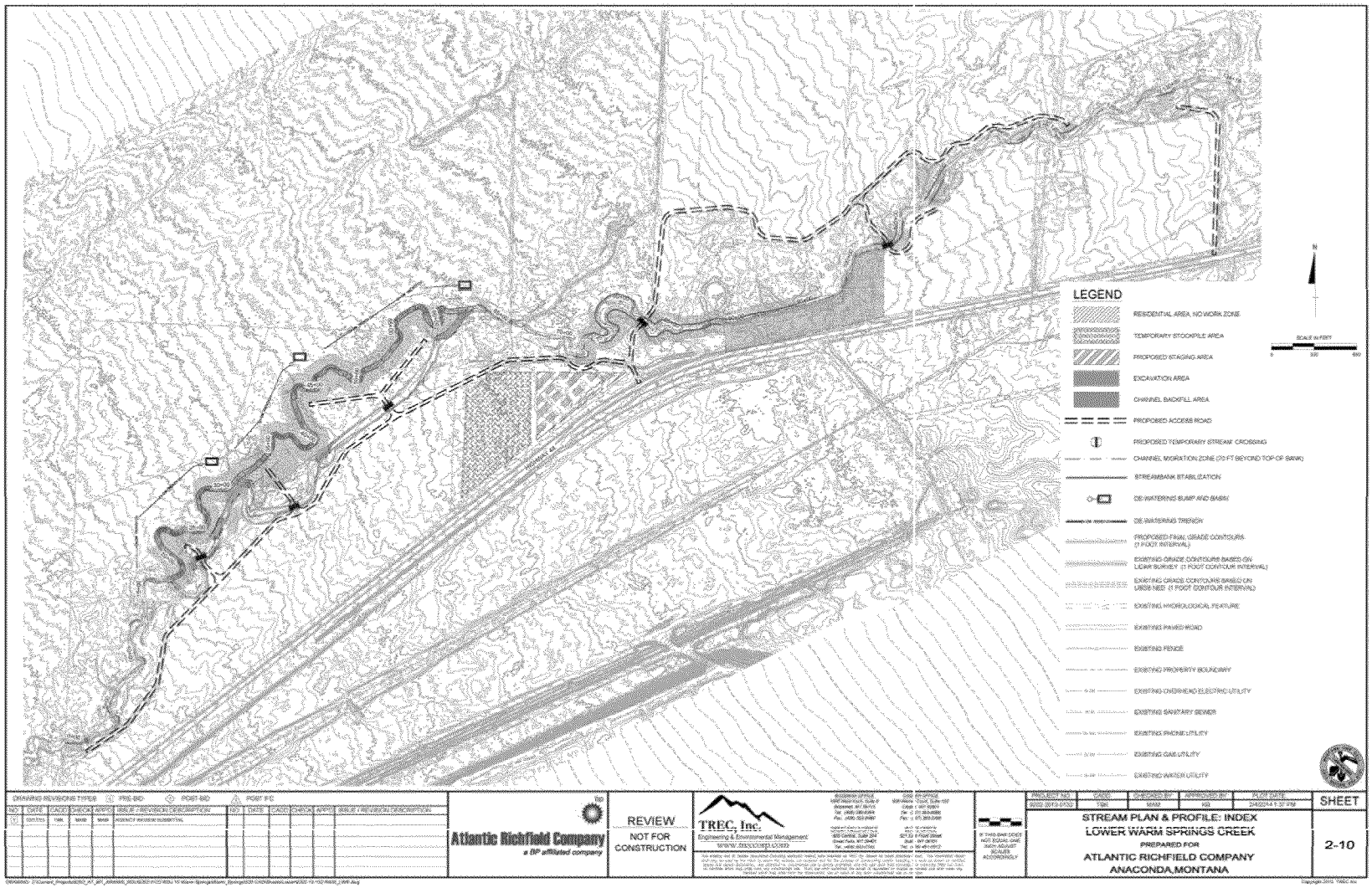
One of the primary goals of the remedial actions described above is to restore flow to the historic, abandoned stream channel. Remedial activities planned for the historic channel include streambed excavation, bank stabilization, and vegetation removal, which will result in a largely new channel. Flow would be restored by plugging the existing channel with clean, native material thereby diverting flow into the historic channel. The existing channel would become an off-channel oxbow or wetland area with an estimated 1-2 feet of standing water. It would likely hold surface water continually due to groundwater inputs and water from the new channel during flood events. This off-channel backwater would increase the storage capacity of the system and provide off-channel wildlife habitat.

A secondary goal of the remedial actions described above is to establish floodplain connectivity for 2-year flood events throughout the Lower Warm Springs Creek Project Area, where possible. For areas that already have 2-year connectivity, contaminated soils will be removed and they will be returned to existing grade. For areas that are more disconnected from the floodplain, contaminated soils will be removed and areas will be graded down to establish 2-year connectivity. Where this is infeasible, a 5-10 foot wide terrace with 2-year connectivity will be constructed.

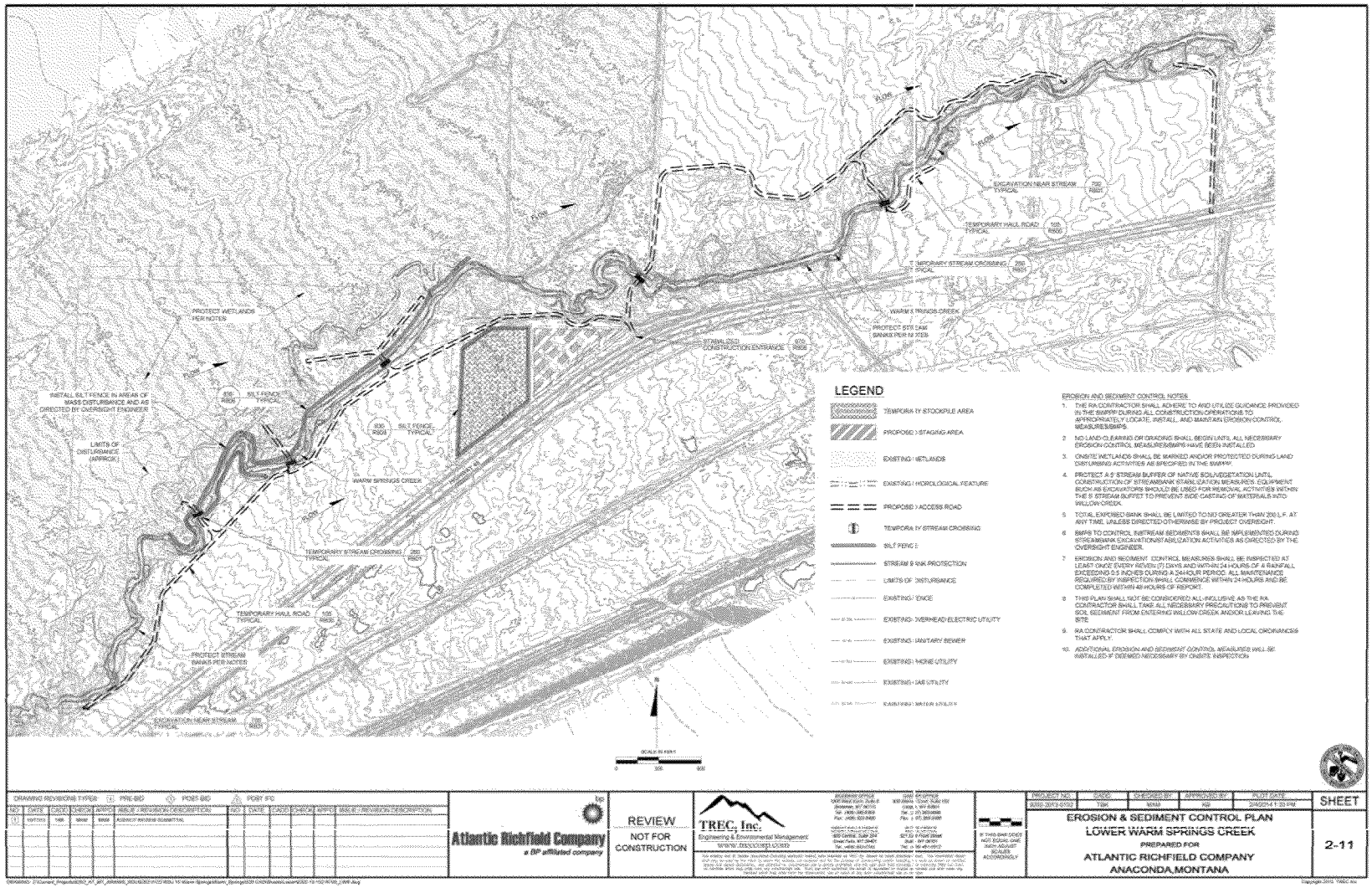





LOWER WARM SPRINGS CREEK
LOWER WARM SPRINGS CREEK
PROPOSED ACCESS POINT TO ROU 6 Area
ANACONDA DEER LODGE AIRPORT
TEMPORARY HAUL ROAD
TEMPORARY STREAM CROSSING
STOCKPILE AND SCREENING AREA
STAGING AREA
OPPORTUNITY PONDS CONSOLIDATION AREA
LEGEND
LIMITS OF EXCAVATION
STOCKPILE AND SCREENING AREA
TEMPORARY STREAM CROSSING
NOTE:
REVIEW
NOT FOR CONSTRUCTION
Atlantic Richfield Company
a BP affiliated company
TREC, Inc.
CONSOLIDATION PLAN & HAUL ROUTES
LOWER WARM SPRINGS CREEK
PREPARED FOR
ATLANTIC RICHFIELD COMPANY
ANACONDA, MONTANA
SHEET
2-9



CDM Smith



2.1.2 Transport and Disposal

Excavated wastes and soil/waste mixtures will be transported to the Opportunity Ponds Waste Management Area (WMA) for disposal (**Figures 2-4 and 2-9**). Because the excavated materials must cross a public road (Highway 48), the Remedial Action Work Plan (RAWP) contains a Transportation Plan, to be approved by the Montana Department of Transportation and the Anaconda-Deer Lodge County road department (Atlantic Richfield 2013). The Transportation Plan includes the following elements:

- Maps showing crossing locations and/or transportation routes
- Details showing crossing construction
- Hours of operations
- Safety measures including signage, flag persons, and/or pilot cars
- Cleaning measures to minimize the tracking of soil/sediment onto the highway
- Key contacts, addresses and phone numbers

The excavated wastes will be transported for disposal to the B2.12 cell of the Opportunity Ponds WMA or other approved locations. The RAWP includes a Disposal Plan that conforms to the requirements set forth in Atlantic Richfield's B2.12 Waste Repository Plan (Atlantic Richfield 2013).

2.1.3 Restoration

The RDU 10 remedial design presented in the Final Remedial Design (FRD) Unit 10 Warm Springs Creek FDR is intended to remediate Warm Springs Creek such that stream water quality meets the 2011 ARWW&S OU ROD performance standards (CDM Smith 2012). As discussed in the Warm Springs Creek FDR (CDM Smith 2012), water quality studies identified reaches where unstable banks or fluvial waste deposits in the floodplain cause significant increases in total recoverable copper concentrations. The four most significant reaches of copper loading (**Figure 2-12**), in order of importance are:

1. Reach between stations WS-4D and WS-5
2. Reach between stations WS-4C and WS-4D
3. Reach between stations WS-4B and WS-4A
4. Reach between stations WS-3 and WS-4

Significant volumes of fluvially-deposited waste have been identified in the Lower Warm Springs Creek Project Area, and increases in metals concentrations in this reach are readily apparent. RAs in this reach are the highest priority (CDM Smith 2012).

Section 32 requires evaluation for long-term stability combined with limited remediation as copper concentrations in this stream reach increase during high flow events. Non-vegetated and unstable banks in Section 32 require remediation as copper loading increases in this reach. Upstream of Section 32, the surface water meets the state of Montana DEQ surface water criteria and this reach and all reaches downstream exceed the aquatic criteria during high flow conditions.